

PROJECT DESCRIPTION

THIS PROJECT INVOLVES A MODIFICATION OF THE EXISTING TRAFFIC SIGNAL INSTALLATION AT THE INTERSECTION OF MD 210 (INDIAN HEAD HIGHWAY) AND OLD FORT ROAD - NORTH. VEHICULAR SIGNAL HEADS FOR ALL APPROACHES WILL BE CHANGED TO BLACK-FACED SIGNALS. VIDEO DETECTION WILL REPLACE THE EXISTING PRESENCE LOOP DETECTORS FOR THE NORTHBOUND AND SOUTHBOUND LEFT TURN MOVEMENTS, THE EASTBOUND AND WESTBOUND APPROACHES, AND THE NORTHBOUND AND SOUTHBOUND SAMPLING LOOPS. MICRO-LOOP PROBES WILL REPLACE THE EXISTING PASSAGE LOOP DETECTORS FOR THE NORTHBOUND AND SOUTHBOUND APPROACHES. LOOP DETECTORS AND PIEZO SENSORS FOR AN EXISTING TRAFFIC MONITORING AND ANALYSIS STATION WILL ALSO BE REPLACED. MD 210 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

CONTROLLER OPERATION

THE EXISTING EIGHT-PHASE FULLY-ACTUATED NEMA CONTROLLER WILL BE USED. THE CONTROLLER WILL CONTINUE TO OPERATE IN A FOUR-PHASE FULLY-ACTUATED MODE WITH THE NORTHBOUND AND SOUTHBOUND MD 210 APPROACHES RUNNING CONCURRENTLY AND THE EASTBOUND AND WESTBOUND OLD FORT ROAD - NORTH APPROACHES RUNNING IN CONSECUTIVE PHASES. EXCLUSIVE PHASING IS PROVIDED FOR THE NORTHBOUND AND SOUTHBOUND LEFT TURN MOVEMENTS. AN ALTERNATE PEDESTRIAN PHASE OPERATES CONCURRENTLY WITH THE EASTBOUND OLD FORT ROAD - NORTH MOVEMENT UP ON PEDESTRIAN ACTUATION. VIDEO DETECTION INTERFACE EQUIPMENT WILL BE INSTALLED IN THE EXISTING CABINET.

MAINTENANCE OF TRAFFIC

THE FOLLOWING WORK ZONE TRAFFIC CONTROL STANDARDS SHALL BE USED FOR THE TRAFFIC SIGNAL-RELATED CONSTRUCTION AND SHALL SUPPLEMENT THE PROJECT TRAFFIC CONTROL PLAN.

STANDARD NO. 104.00
STANDARD NO. 104.44-01 (LEFT LANE CLOSURE)
STANDARD NO. 104.45-01 (RIGHT LANE CLOSURE)
STANDARD NO. 104.46-01 (CENTER LANE CLOSURE)
STANDARD NO. 104.48-01 (INTERSECTION (LEFT LANE/TURN BAY CLOSURE))
STANDARD NO. 104.49-01 (SHOULDER WORK)

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. MAJID SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(301) 513-7358

MR. AUGUSTINE REBISH
ASSISTANT DISTRICT ENGINEER - UTILITIES
(301) 513-7350

MR. RALEIGH MEDLEY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 513-7304

CONTACT PERSONS FOR THE OFFICE OF TRAFFIC AND SAFETY ARE AS FOLLOWS:

MR. RICHARD DAFF SR.
DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

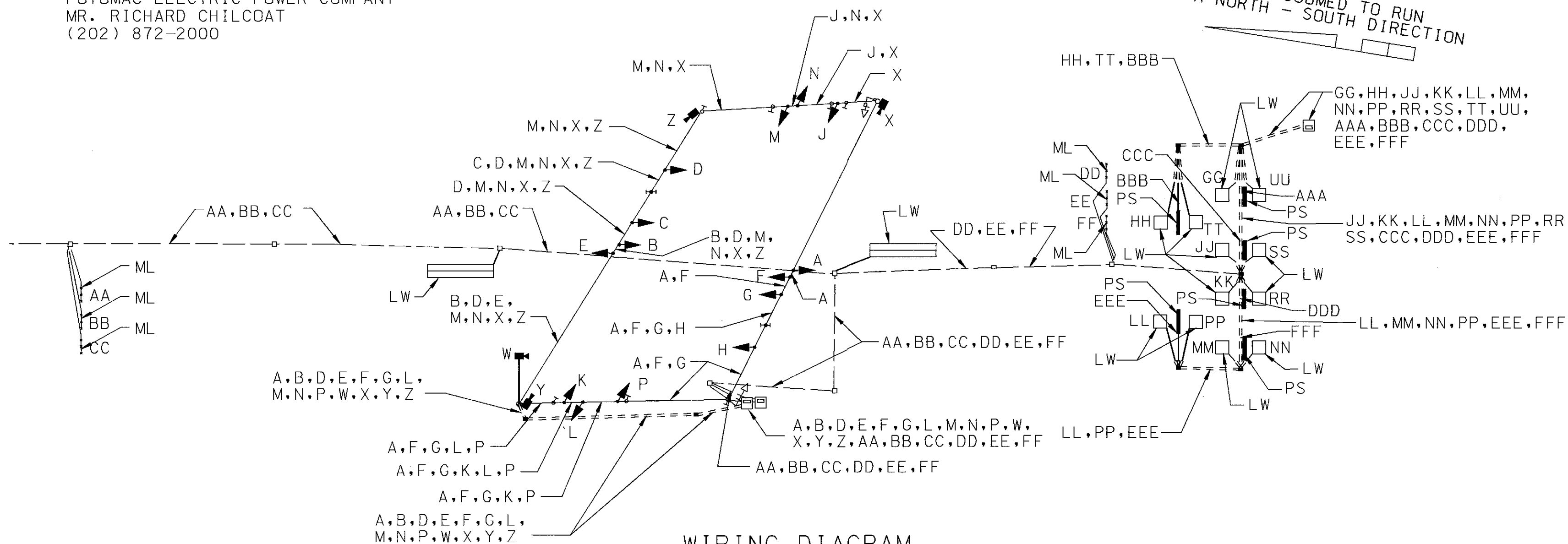
MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7631

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
410-787-7652

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7676

THE POWER COMPANY REPRESENTATIVE IS:

POTOMAC ELECTRIC POWER COMPANY
MR. RICHARD CHILCOAT
(202) 872-2000



WIRING LEGEND

- A,B,E,F,L,M,N,P - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
C,D,G,H,J,K - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
AA,BB,CC,DD,EE,FF - MICRO-LOOP PROBE LEAD-IN
W,X,Y,Z - VIDEO DETECTION CAMERA CONTROL CABLE
PS - PIEZO SENSOR
ML - MICRO-LOOP PROBE SET
LW - LOOP WIRE ENCASED IN 1/4 INCH FLEXIBLE TUBING (NO. 14 A.W.G.)
GG,HH,JJ,KK,LL,MM, NN,PP,RR,SS,TT,UU - 2-CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED (NO. 14 A.W.G.)
AAA,BBB,CCC,DDD, EEE,FFF - PIEZO SENSOR LEAD-IN

WIRING NOTE:

- EXISTING WIRING FOR EQUIPMENT WHICH IS BEING REMOVED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- EXISTING LEAD-IN CABLE FOR LOOP DETECTORS WHICH ARE BEING ABANDONED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- EXISTING WIRING NOT DETAILED SHALL REMAIN IN PLACE.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	DESCRIPTION
9001	1 EA	VIDEO INTERFACE EQUIPMENT
9002	1 EA	RETRO RACK
9003	3 EA	FOUR CHANNEL LOOP DETECTOR AMPLIFIER, RACK MOUNT
9004	22 SF	SHEET ALUMINUM SIGNS

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
2001	5 CY	TEST PIT EXCAVATION
8001	1 LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8002	2 EA	RELOCATE EXISTING OVERHEAD SIGN
8003	2 EA	PUSHBUTTON SIGN
8004	2 EA	INSTALL CONDUIT BEND IN EXISTING BASE
8005	6 EA	FURNISH AND INSTALL PIEZO SENSOR (WIM) WITH 200 FOOT LEAD IN
8006	25 SF	REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS
8007	170 LF	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8008	110 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8009	85 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8010	110 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8011	25 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8012	60 LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8013	6 EA	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
8014	7 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8015	22 SF	INSTALL OVERHEAD SIGN
8016	4 EA	VIDEO DETECTION CAMERA
8017	2 EA	CONTROL CABLE, 250, VIDEO DETECTION CAMERA TO CONTROLLER
8018	2 EA	CONTROL CABLE, 500, VIDEO DETECTION CAMERA TO CONTROLLER
8019	1 EA	AS-BUILT FOR TRAFFIC SIGNAL HEAD SECTION
8020	46 EA	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8021	1500 LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8022	800 LF	ELECTRICAL CABLE - 5 CONDUCTOR (No 14 AWG)
8023	2500 LF	ELECTRICAL CABLE - 7 CONDUCTOR (No 14 AWG)
8024	2500 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (No 14 AWG)
8025	900 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
8027	1 EA	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

PHASE 1 & 5	<G-	<G-	R	R	<G-	<G-	R	R	R	R	R	R	R	R	DW	DW
1 & 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6															
PHASE 1 & 6	<G-	<G-	G	G	<R-	<R-	R	R	R	R	R	R	R	R	DW	DW
1 & 6 CHANGE	<Y-	<Y-	Y	Y	<R-	<R-	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 & 5	<R-	<R-	R	R	<G-	<G-	G	G	R	R	R	R	R	R	DW	DW
2 & 5 CHANGE	<R-	<R-	R	R	<Y-	<Y-	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 2 & 6	<R-	<R-	G	G	<R-	<R-	G	G	R	R	R	R	R	R	W	W
2 & 6 CHANGE	<R-	<R-	Y	Y	<R-	<R-	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 3	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	<G- G	G	G	DW	DW
3 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	Y	Y	Y	DW	DW
PHASE 4	<R-	<R-	R	R	<R-	<R-	R	R	<G- G	<G- G	G	R	R	R	DW	DW
4 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	Y	Y	Y	R	R	R	DW	DW
ALT. 3	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	<G- G	G	G	W	W
PED. CLEAR	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	<G- G	G	G	FL/DW	FL/DW
ALT. 3 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/ <R-	FL/ <R-	FL/ Y	FL/ Y	FL/ <R-	FL/ <R-	FL/ Y	FL/ Y	FL/ R	FL/ R	FL/ R	FL/ R	FL/ R	FL/ R	DARK	DARK

TSP-3

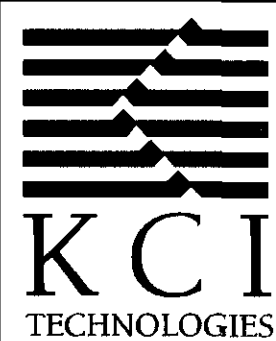


MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 210 (INDIAN HEAD HIGHWAY) AT
OLD FORT ROAD - NORTH

DRAWN BY: J. LAWRENCE
CHECKED BY: A. HOTTENSTEIN
SCALE: NONE
DATE: 10/02

F.A.P. NO. PC408A21
S.H.A. NO. PRINCE GEORGE'S
COUNTY: 16021009.89
LOG MILE:

TS NO. 1173J-G1
SHEET NO. 3 OF 3
T.I.M.S. NO. F402



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